

PHILADELPHIA MEDICAL TIMES.

SATURDAY, JANUARY 3, 1874.

ORIGINAL COMMUNICATIONS.

ON WHAT WAS FOUND IN THE ALIMENTARY CANAL OF LUCIOPERCA.

BY HENRY C. CHAPMAN, M.D.

TO the naturalist no family of animals is more interesting than the entozoa, while to the physician some knowledge at least of this subject is of practical importance. The physiologist observes in these animals nutrition carried on without a stomach or intestines, which were so long regarded as absolutely necessary to the maintenance of animal life; while the embryologist sees in the generative organs a true hermaphroditic structure, and has constantly the opportunity of readily following the development of an animal from the state of the egg to that of the adult. By such investigations the ravages of trichiniasis have been checked, and the possibility of eradicating diseases like *staggers* and hydatids has been demonstrated. Naturally, therefore, when the opportunity presents, the viscera should be carefully examined for entozoa, so called in contradistinction to the epizoa, or those parasites which live externally. Sometimes little or nothing new is discovered; occasionally a new species appears; while nearly always some object of interest rewards the labor bestowed. Thanks to Mr. Francis Wistar, of Duncannon, Pa., I had the opportunity of dissecting the so called pike perch, or *Lucioperca*, a member of the Percoid family of fishes, often erroneously known as the *Susquehanna* salmon. Opening the stomach, intestine, and cæcal appendages, I found them filled with worms. I transmitted the viscera containing the worms to Dr. Leidy, who kindly determined for me the genera and called my attention to many interesting points in their economy. Before noticing the worms, it seems proper to mention here that Dr. Leidy discovered also in the stomach of the fish the valve of a *Lingula*, a marine shell-fish never found north of North Carolina: this is a very interesting fact, and important in reference to the habits of the fish, which has always been supposed to be confined to fresh waters, and not migratory. The only explanation, however, of the finding of the shell in the stomach, is that the fish swallowed it near the North Carolina coast and then went northward. The worms infesting the viscera of animals are either flat or round, called by helminthologists *Platelmynthes* and *Nematelmynthes*; the tape-worm or *Tænia* will serve to represent the first order, the *Trichina* the second. Every one is more or less familiar with the general form of the *Tænia solium*, or tape-worm of man,—a long worm exhibiting an expanded head, with four suckers and a circlet of hooks, a slender neck composed of narrow segments or joints, a body in which the joints are broad and much flattened, the posterior ones containing the generative apparatus; each segment contains a male and a female organ, which are self-impregnating, an instance of true

hermaphroditism. At the margins of the joints may be seen the apertures through which the penis protrudes or the eggs escape. The position of these apertures is important as a means of determining the genus: thus, in the *Bothriocephalus* or *Tænia lata* the apertures are in the middle of the broad surface of the segments. The tape-worms in our *Lucioperca* belong to this genus, and are probably a new species. The tape-worm nourishes itself by simply imbibing the juices in the alimentary canal of the animal in which it lives. For a long time the origin of the tape-worm was involved in great obscurity; the cause of this was due, no doubt, to the fact of the tape-worm passing its embryo phase in one animal, its adult stage in another. Indeed, these different stages of existence were formerly supposed to be distinct animals, and described as such. Thus, the *Tænia solium* of man is found in its embryo condition in the muscles of the pig; at this stage of its existence it is known as the *Cysticercus cellulosus*, and its presence gives rise to *measly* pork. Should some of this *measly* pork be eaten raw or partially-cooked by a human being, the embryo *Tænia* or *Cysticercus*, finding in the intestine proper nourishment, develops, joint after joint is added, until finally the *Cysticercus* becomes a *Tænia*. In the segments most remote from the head, as before stated, are seen the generative organs, in which are found the eggs. These joints are passed off from time to time with the *fæces*, which are eaten by pigs; in the stomach of these animals the eggs develop into minute spined embryos; these migrate from the stomach and reach the various tissues, where they are transformed into *Cysticerci*. The *Tænia mediocanellata*, which differs from the *Tænia solium* in not having the circlet of hooks in the head, as well as in other characters, is derived from raw beef, which often contains the *Cysticercus* of that tape-worm. The disease in sheep known as *staggers* is due to the presence in the brain of the *Cœnurus cerebrialis*; the *Cœnurus* becomes in the intestines of the dog a tape-worm. The hydatids known as *Echinococci* are also only undeveloped tape-worms. The *Cysticercus* of the rat in the alimentary canal of the cat becomes a *Tænia*. As yet the *Cysticercus* of the tape-worm of our *Lucioperca* is unknown. These names—*Cysticercus*, *Cœnurus*, *Echinococcus*—ought to be discarded, since they only confuse, giving the idea that these organisms are distinct animals, whereas they are only the young of different *Tæniæ*. In reference to this matter there is an interesting fact in the literature of helminthology, not generally known, and not alluded to by Cobbold, which makes part of the true history of the development of the *Trichina*. In 1836 Professor Owen described the *Trichina spiralis* in man; in 1846 Dr. Leidy gave an account of the *Trichina spiralis* he found in the pig. Professor Leuckart,* as he acknowledges in his work, availed himself of Dr. Leidy's discovery by

* Untersuchungen über *Trichina Spiralis*, 1860, p. 18. "Eingedenk der Angaben Leidy's nach denen *Trichina Spiralis* gelegentlich auch in den Muskeln des Schweines gefunden werden konnte Ich in der Wahl des Versuchthieres kaum zweifelhaft sein."

using the pig in his investigations on Trichiniasis in 1860, and demonstrated that the Trichina of the pig when taken into the intestines of man laid eggs which developed embryos, and that these migrated into the tissues of the individual who had eaten the raw pork,—a common custom in Germany. Two genera of round worms, of which the Trichina is an example, were found in the alimentary canal of our pike perch. One of these was an Echinorhynchus,—the bristly-snout worm, so called from the snout being provided with bristles. The other genus was a Nematoid, as yet not investigated. The Ascaris, or thread-worm of the human body, is a familiar example of a Nematoid.

Man usually assumes that the world was made for him, forgetting that when the axe of civilization is heard there die out the most beautiful birds, brilliant insects, lovely flowers, and other bright forms that enchant the eye of the wanderer among tropical forests. If the nervous system of the tape-worm and Trichina were as much developed as that of man, and they reasoned after his manner, they would at once conclude that many animals were made for them; for are not the rabbit and dog the homes of the *Tænia serrata*, the rat and the cat necessary to the existence of the *Tænia crassicolis*, while the pig and man—the lord of creation—are only the dwelling-places of Trichina, *Tænia*, and other worms?

A CASE OF IMPREGNATION WITHOUT INTROMISSION.

BY THOMAS HAY, M.D.,

Philadelphia.

THE following case is interesting as illustrating the fact that impregnation can take place without intromission. It shows, too, that a persistent hymen is no evidence in a case of rape.

In this case the semen was expended on the external parts, and the spermatozoa, by their peculiar motions, through affinity or attraction, found their way into the uterus, and came in contact with, and fecundated, the ovum.

I was visited by Mr. and Mrs. G., from New Jersey, in consequence of enlargement of the lady's abdomen. A belief was induced that a tumor from disease had made its appearance, and that it was growing inside.

This belief was strengthened and almost confirmed by the fact that the existence of pregnancy was not thought possible, and such opinion was not entertained in her case. She had been married more than four months, there *never was intromission*, and the *courses appeared regularly as usual*.

The husband was aware of the presence of an unyielding obstacle, and the severe pain at coition made penetration impossible. Modesty and other reasons caused delay in seeking medical advice till the already enlarged abdomen was increased in size, and the pain during intercourse had become so great that it was no longer attempted:

Examination showed a strong, unyielding hymen, attached all round the vagina *near its entrance*, hav-

ing a hole above the middle large enough only to admit the tip of the little finger; a vascular tumor of the urethra, and extensive erythema of the vulva; the parts were irritable, and the touch of the finger caused the patient to cry out from pain.

I made a crucial incision into the hymen, cut off the four angular flaps, excised the vascular tumor, and applied caustic.

The opening made was maintained by cylinders of lint. The pelvic cavity was normal, and the parts soon healed.

The lady had been three months pregnant, and, as the signs of pregnancy increased, she, as well as the husband, became better satisfied with my diagnosis; and when, after about six months, she was delivered of a healthy, well-developed boy, both were convinced of its correctness, and, as indulgence in the connubial privilege was no longer a cause of pain, they were quite happy.

MEMORANDA OF THE EFFECTS OF CARBOLIC ACID IN A LARGE DOSE.

BY S. J. RADCLIFFE, M.D.,

Washington, D.C.

GENERAL H., a retired officer of the army, had been suffering from an attack of chronic articular rheumatism. On the 27th of November I prescribed for him an effervescing saline draught, consisting of eight ounces of a carbonated solution, and an acid solution containing one ounce of citric acid and eight ounces of water,—half an ounce of each to be taken while effervescing.

I visited him on the morning of the 28th, and found him sitting on the bed, a vessel at the bedside one-third filled with matter, probably about a pint, seemingly from the stomach, mixed with blood. On inquiring what was the matter, he replied he had been vomiting, and his nose had been bleeding. He said he had taken, a little while before my visit, the first dose of the medicine prescribed, and it did not effervesce as I had said it would, but made him very sick, and he threw it up with the contents of his stomach, and his nose bled quite freely immediately after. On tasting the mixture in the vial containing the acid solution, I at once recognized the flavor, and informed the general that he had taken a pretty good dose of carbolie acid, the odor of which he then for the first time remembered. I took the vial containing the acid solution to the drug-store, and the drug clerk admitted confusedly, after seeing the prescription again, that he had made the mistake and put an ounce of fluid carbolie acid in eight ounces of water, instead of an ounce of citric acid. There was about half a drachm of the acid in each dose, the quantity the patient took. Fortunately for him, he took it on a full stomach, after breakfast, or it would doubtless have produced disastrous results. As it was, he experienced no other effects than nausea, epistaxis, some drowsiness, and a bad taste in the mouth during the day.

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REPORT ON THIRTY CASES OF CHOREA.

BY GEORGE S. GERHARD, M.D.,

Assistant Physician to the Orthopedic Hospital and Infirmary for Nervous Diseases.

THE majority of the following cases of chorea were obtained from the records of the department for nervous diseases connected with the Ortho-

pedic Hospital; for the data of the remainder I am indebted to Dr. Mitchell, who very kindly placed his private case-books at my disposal.

So far as I have been able to discover, this is the first collection of cases of chorea that has been made in this country.

I have arranged the cases in a tabular form, in order to facilitate analysis.

NO.	SEX.	AGE.	SIDE AFFECTED.	DURATION OF COMPLAINT BEFORE TREATMENT.	APPARENT EXCITING CAUSE.	MODE OF ONSET AND SEASON OF YEAR.	PREVIOUS ATTACKS.	PECULIARITY OF SYMPTOMS.	TREATMENT.	RESULT.	ADDITIONAL REMARKS.
1	M.	8	Right.	From infancy.	Followed infantile convulsions.	Sudden.					
2	F.	16	Entire body.	Fifteen years off and on.	Fright.	Gradual.		Partial right hemiplegia, and carpo-pedal spasm.	Arsenic; division of tendo-achillis and plantar fasciapparatius; galvanism; arsenic.	Marked improvement.	
3	F.	9	Entire body.	Three weeks.	Fright.	Gradual; summer.				Marked improvement.	
4	M.	17	Right.	Three m'ths.	None discovered.	Gradual.		Patient exceedingly irritable.	Arsenic; zinc.	Cure.	
5	M.	16	Entire body.	Ten years.	No assignable cause.	Gradual.		Loss of power in right arm and leg; attacks of "petit mal."	Bromide and iodide of potassium.	Unknown.	
6	M.	7	Entire body.	Six weeks.	None discovered.	Gradual.	One previous attack.	Loss of power in some of the facial muscles. Movements very violent.	Galvanism; zinc.	Cure.	
7	F.	8	Both arms, head, and neck.	Four months.	Rheumatism.	Gradual.	A slight previous attack.	Harsh systolic apex murmur; loss of power in left arm and leg.	Arsenic; cold douche; chloral occasionally at night.	Cure.	
8	F.	4	Both sides, but right chiefly.	Three m'ths.	None discovered.	Spring.		Loud noise during respiratory movements.	Arsenic; cold douche.	Marked improvement.	
9	M.	12	Head and shoulders, and occasionally the face.	Five months.	No assignable cause.	Both attacks occurred in the spring.	One previous attack.	Patient exceedingly irritable.	Cimicifuga; arsenic.	Marked improvement.	
10	F.	16	Right.	Six years.	Fright.	Autumn.			Arsenic.	Cure.	
11	F.	22	Right.	Nine years off and on.	Fright.			Systolic apex murmur.	Arsenic.	Not known.	
12	F.	17	Both sides, but chiefly the right.	Two weeks.	Violent and long-continued toothache.	Winter.			Bromide of potassium; arsenic; iron.	Cure.	
13	F.	9	Right.	Eight weeks.	Fright.				Arsenic; cold douche.	Cure.	
14	F.	15	Right.	Ten months.	Fright.	Gradual, and preceded by pain in arm.		Slight loss of power in right leg.	Zinc; arsenic; cold douche.	Great improvement.	
15	F.	7	Entire body.	Four weeks.	Violent abdominal pain.	Spring.		Loss of power in right arm and leg.	Zinc; douche.	Cure.	
16	M.	8	Left.	Three weeks.	Rheumatism.	Spring.			Arsenic; purgatives.	Cure.	
17	M.	14	Head and right arm.	Two weeks.	Fright.	All of the attacks occurred in the spring.	Two previous attacks.	Murmur of mitral regurgitation.	Arsenic; iron.	Cure.	
18	F.	16	Left.	Two months.	Suppression mensium.	Spring.	One previous attack.		Zinc.	Marked improvement.	
19	M.	8	Right.	Three years off and on.	Rheumatism.	Winter.		Loss of power in legs.	Arsenic.	Cure.	
20	F.	17	Left.	One month.	Rheumatism.	Sudden; spring.		Murmur of mitral regurgitation.	Syr. ferri iod. ol. morrhue.	Improvement.	
21	F.	16	Entire body, but chiefly right side.	Three years off and on.	None discovered.			Soft basic systolic murmur.	Arsenic; chloral.	Improvement.	
22	F.	9	Entire body, but chiefly left side.	Eight m'ths.	None discovered.	Spring.			Iron; arsenic.	Left off attendance.	Neurotic family history.
23	F.	14	Left.	Two months.	Uterine irritation.				Sulphate of zinc.	Not stated.	
								Some loss of power in left side.	Arsenic; atropia.	Marked improvement.	

NO.	SEX.	AGE.	SIDE AFFECTED.	DURATION OF COMPLAINT BEFORE TREATMENT.	APPARENT EXCITING CAUSE.	MODE OF ONSET AND SEASON OF YEAR.	PREVIOUS ATTACKS.	PECULIARITY OF SYMPTOMS.	TREATMENT.	RESULT.	ADDITIONAL REMARKS.
24	F.	14	Left.	Ten days.	Mental worry.	.....	.....	.....	Sulphate of zinc; cold douche; arsenic.	Cure.	One sister had chorea.
25	F.	11	Right.	One year.	Hard study and mental worry.	Summer.	.....	Loss of power in right arm and leg.	Arsenic.	Improvement.	Neurotic family history.
26	F.	13	Right.	Six weeks.	Blow upon hand.	Summer.	.....	.....	Sulphate of zinc.	Cure.	One sister attends hospital for epilepsy.
27	F.	4	Entire body, but chiefly the left.	Two weeks.	No assignable cause.	Gradual; spring.	.....	Movements very violent; loss of power in right side.	Arsenic; douche; cimetifuga.	Cure.	
28	F.	10	Entire body.	.....	No assignable cause.	All attacks occurred in the spring.	Three previous attacks.	Child became very pert.	Arsenic.	Cure.	
29	M.	18	Right.	.....	No assignable cause.	Both attacks occurred in the spring.	One previous attack.	.....	Gymnastics.	Cure.	
30	M.	7	Entire body.	One month.	Mental distress.	Summer.	.....	Curious forward and backward movement.	Zinc; arsenic; douche.	Cure.	

In reviewing the preceding table, we find in regard to the age and sex of the patients that there were—

Under 10 years of age 12 cases: 5 males 7 females.
From 10 to 21 " 18 " 5 " 13 "

Total 30 cases: 10 males 20 females.

This table agrees with the common observation that chorea is essentially a disease of early life, and that females are more prone to the disease than males.

In the second period of the summary the number of females is more than twice as great as the number of males,—a disproportion which may be accounted for by the fact that the period mentioned embraces the age of puberty, when the female is especially liable to disturbances of a nervous kind.

In fifteen cases the affection was entirely unilateral, the irregular movements being confined in ten instances to the right side, and in five to the left. In seven cases the choreic movements were stated to have been general; in three to have been general, but particularly marked upon the right side; and in two cases to have been general, but chiefly pronounced upon the left side. In the remaining two cases the movements were confined to certain groups of muscles.

According to M. Sée, the irregular movements of chorea ordinarily predominate on the left side. Dr. James Russell, on the contrary (*A Contribution to the Clinical History of Choreia, Medical Times and Gazette*, 1868 and 1869), found in twenty-nine cases in which the disease was unilateral that the irregular movements were confined in eleven instances to the left side, and to the right in eighteen. Dr. Hughlings Jackson states that the side (as in hemiplegia from embolism) usually affected is the right.

Dr. Russell states that many cases of chorea commencing unilaterally ultimately become bilateral. As an illustration of this point, the following case may be related:

Jane McC., æt. 4, was seen for the first time on the 25th of May, 1873, about one week after her mother had first observed twitchings of the muscles of the left side of the face and of the left arm. The irregular movements had gradually become more violent, and had extended to the left leg, but not to the right side of the body. The patient was ordered to have cold affusions to the spine night and morning, and to take arsenic in increasing doses. On the 28th the movements had extended to the right side, and were almost as violent as upon the side first affected. The child finally recovered, but her convalescence was prolonged by partial left hemiplegia.

In regard to the alleged cause of the disease, it will be seen from the table that it was ascribed to fright in seven cases; to rheumatism in four; to violent pain in three; to mental worry in three; to uterine irritation in two; to infantile convulsions in one: total, twenty. In the ten remaining cases no cause was discovered.

This table shows, what is in accordance with clinical experience, that fright and rheumatism are frequent causes of chorea. Cardiac murmurs were found in the four cases in which rheumatism was presumed to have been the exciting cause of the complaint. Dr. Kirkes maintained that when a connection between rheumatism and chorea is found to exist there has been an inflammation of the valves of the heart, and that the association is not between chorea and rheumatism, but between chorea and valvular disease of the heart.

Of the many theories that have been advanced by writers on chorea to account for the connection of the disease with a cardiac lesion, there remains but one—the theory of embolism—which has not been abandoned as untenable.

In the majority of the cases in which fright was the assigned cause of the disease, there was an interval of some days or even weeks between the exposure to the cause and the development of symptoms. In a few instances, however, there was an immediate outbreak of choreic movements. In Case 10, a girl ten years of age, irregular movements began almost

immediately after the patient had been frightened by having a dead cat flung at her.

In two of the cases in which no exciting cause could be found there existed a distinctly neurotic family history. In three cases, all females, aged seven, eleven, and fourteen, respectively, the choreic movements followed prolonged mental efforts on the part of the patients to take a good standing in their classes at the July examinations. I have recently heard of three other cases in which chorea was developed under similar circumstances.

Dr. Mitchell has observed that chorea occurs more frequently, and in a more severe form, in the spring than at any other season of the year. He has also found that the attacks of epileptics, besides being of more frequent occurrence in the spring, are much more difficult to control than at other seasons.

A glance at the table will show that the attacks occurred in the spring in thirteen cases; summer, four; autumn, one; winter, two: total, twenty.

In the ten remaining cases the point is not mentioned. It is difficult to offer any explanation for this remarkable preference of chorea for the spring months, unless it is due to the enervating weather of the season in question. Of seven cases in which previous attacks had occurred, five had had one previous attack, one had had two, and in the seventh case the patient had suffered from three. All but one of these previous attacks had occurred in the spring; and the tendency that chorea has to recur at this season is thus very well shown.

The presence of partial paralysis of some kind was noted in nine cases. Out of this number five had right hemiplegia, two had left hemiplegia, and of the remaining two cases there was loss of power in some of the facial muscles in one instance, and in one leg in the other. The frequent occurrence of unilateral chorea, and of "choreic hemiplegia," unquestionably gives much support to the theories advanced by Drs. Hughlings Jackson and Broadbent in regard to the seat of the lesion of the disease. Dr. Jackson (*Edinburgh Medical Journal*, 1868) has gone so far as to localize the seat of the lesion in the "convolutions near the corpus striatum."

Dr. Broadbent (*British Medical Journal*, 1869) is of the opinion that the lesion is situated in the sensori-motor ganglia; and he thinks that the phrase "delirium of the sensori-motor ganglia" is more applicable to the disease than "insanity of the muscles." In regard to the nature of the lesion, Dr. Jackson is disposed to believe exclusively in embolic obstruction of the smaller branches of the middle meningeal artery. In answer to the often-urged argument against embolism being the cause of chorea, that anæmia from plugging of vessels can scarcely lead to increased expenditure of force, Dr. Jackson quotes the conclusion arrived at by MM. Cotard and Prévost, that "obstruction of arteries is ordinarily followed by hyperæmia," etc.

Dr. Broadbent holds that the symptoms characteristic of chorea arise not from any peculiarity of the morbid change, but out of the function of the particular centres affected.

Both of these writers agree in laying much stress

upon impairment of nutrition causing "instability" of the part affected, as opposed to destruction of function. The presence of anæsthesia or of disturbance of the special senses was not noted in any of the cases contained in the table, and it may be stated in this connection that Dr. Mitchell examined the eye-ground in a number of instances, but the results were always of a negative character.

It will be seen from the table that the main treatment of the disease in the majority of cases consisted in the administration of arsenic. This metal was generally exhibited in the form of Fowler's solution, and the doses, small at first, were gradually increased until slight toxic effects were produced. On the occurrence of constitutional symptoms the patients were directed to gradually reduce the doses of the medicine, and then to increase them again. In the more obstinate cases arsenic was pushed to its full toxic effect. Zinc in the form of sulphate was employed in a number of cases, and with a result almost as good as that following the use of arsenic. The mode of its administration was much the same as that adopted in the case of arsenic: that is, in doses gradually increased. In the majority of instances, in addition to the medicinal treatment, the patients were directed to have cold affusions to the nape of the neck and to the spine. The cold douche has been found to be a valuable adjunct to the treatment.

The constant current was employed in a few cases, but its application was not attended by any markedly good results. We think that its power to relieve choreic movements has been greatly overrated. In several cases there was a cessation of the movements while the current was passing.

In reviewing the table, we find that the result of treatment was—

Cures	16 cases.
Marked improvement	7 "
Result not known	4 "
Improvement	3 "
Total	30 "

It is highly probable that a number of the cases in which the notes "improvement," "result not known," and "marked improvement," were made, were ultimately cured, but neglected to return to make a final report.

A CASE OF SPINA BIFIDA CURED BY ASPIRATION AND INJECTION OF IODINE.

BY CHARLES M. ELLIS, M.D.

ON the 9th of May ult., I saw, in consultation with my friend Dr. R. C. Carter, a little girl, two years old, with a congenital tumor over the lumbosacral region of the spine. When first observed shortly after the child's birth, it was no larger than a hickory-nut, but had now attained a longitudinal diameter of three inches, the lateral diameter being rather less: it projected above the surface about one and a half inches. It was decidedly fluctuating, and pressure produced marked uneasiness and flushing of the face. In the erect posture the tumor was

tense and more resisting, but became soft and fluctuating when the child was laid on its face. It was a case of spina bifida.

The skin-covering was perfect, and the case was uncomplicated by hydrocephalus or other bodily deformity. The nutrition of the lower limbs was unimpaired. The child's health being in all respects excellent, I regarded it as a most favorable case for surgical interference. Using my hypodermic syringe as an aspirator, I evacuated the sac, drawing off more than six ounces of spinal fluid, and applied firm pressure over the sac by means of a double spica. This was done tentatively with the view of impeding its growth, which had recently been very rapid, until I could return at a future day prepared to attempt its radical cure. In a short time the sac refilled.

On the 3d of June I again saw the child. The tumor was a trifle larger than a month before. I again drew off the fluid by means of the hypodermic syringe, and, closing the orifice in the bony canal by my finger, I injected about three drachms of a solution of iodine and iodide of potassium: five grains of the former, and fifteen grains of the iodide, to an ounce of alcohol. Much to my annoyance, I was unable to aspirate the iodized fluid, and after a few minutes of unsuccessful efforts I threw into the sac a fluidounce of the spinal liquor, which had been kept at 100° Fahr. I now plugged the opening by a compress firmly held in place by a double spica. I have little faith, however, that I prevented the fluid entering the canal. For two or three days the child was very restless, had a high temperature, —106° Fahr.,—and frequent pulse, 140. No special symptoms of spinal irritation were developed. These unfavorable symptoms gradually subsided, and the child soon regained its accustomed health, and the tumor regained its former dimensions; but it was less elastic and less translucent, and gave to the touch a doughy feeling. The spica was replaced by an elastic pelvic bandage, which has since kept up constant pressure. Six weeks later, the tumor was notably smaller and harder, and at the date of this writing Dr. Carter informs me that the cure is perfect, the only remaining evidence of the tumor consisting in a thickening of the integuments.

With a properly constructed aspirator (Dieulafoy's), the retention of the iodized fluid would not have occurred, and the operation would have been at once executed with speed, safety, and success.

ELKTON, MD., November, 1873.

TINEA SYCOSIS.

BY JULIO J. LAMADRID, M.D.

AFTER reading the two interesting cases of tinea sycosis in a late issue of your journal, reported by Dr. George G. Wood, there recurred to my mind two similar cases which came under my observation during this year; and, as my treatment was different, and with as good success as that mentioned in Prof. Niemeyer's Practice and now recommended by Dr. Wood, I thought it a good

opportunity to have my two cases reported through the columns of your journal, for other physicians to give it a trial, as it is the easiest way to cure such cases.

Case I.—L. M., a mechanic, aged 35 years, of sound constitution, came to my office last May with an eruption of small acuminate pustules upon the chin and lower lip, which on close examination I found to be what is called the "barber's itch," contracted, five weeks previously to my seeing him, in a barber-shop. As there seemed to be a great deal of inflammation, I advised the application of poultices, and told him to call again in two days. I then had his beard removed with a pair of scissors,—not with the razor, as advised by Dr. Wood, for fear it would increase the irritation,—and prescribed for him the following:

R Acid. carb. cryst., gr. xxx;
Glycerinæ, fʒi. M.

Sig.—To be applied twice a day, after the affected part has been thoroughly washed with tepid water and Castile soap. He called again in a week, completely cured, and remarked that in the future he would provide himself with a razor, etc.

Case II.—T. B., a clerk, aged 18 years, came to me last September, with the same complaint as Case I., with the exception of the disease being of less duration and severity, and accordingly I prescribed the acid in less quantity, and to be used as in the former case. In less than a week he was free from the disease.

BROOKLYN, L. I.

NOTES OF HOSPITAL PRACTICE.

PENNSYLVANIA HOSPITAL.

CLINICAL SERVICE OF PROF. DA COSTA.

Reported by R. S. KEBLOR.

RHEUMATOID ARTHRITIS.

THE affection which we are about to consider has been known by various names, such as rheumatic gout, rheumatoid arthritis, etc., which latter has been generally adopted as a sort of compromise between the two prevailing and contending theories as to its nature,—rheumatic or gouty. It affects persons of an anæmic or scrofulous constitution, and is usually traceable to exposure to cold or damp. It begins with slight swelling of the smaller joints, as a rule, with tenderness, but no discoloration. The swelling is due to an inflammation, with effusion of water or pus, which finally subsides, and the swelling disappears. This is now followed by a thickening of the synovial membranes, and the formation of "vegetations," which gradually harden, and stiffness of the joint supervenes.

Second attacks are apt to follow upon partial convalescence, leading to complete disorganization of the joints affected; finally we find loss of articular cartilage, the bones, becoming eburnated, produce the peculiar grating sound noticed when the joints are moved. Dislocation is a frequent sequence.

The constitutional involvement is peculiar, and, as we become more familiar with the disease, affords a valuable aid in its diagnosis. It is usually subacute, and presents no fever-phenomena, no uric acid or increase of fibrin in the blood, and no acid perspiration; neither are there deposits in the finger-joints and ears, as in gout. There is no history of hereditary rheumatism or gout. The absence of cardiac symptoms is peculiar. These lesions are so intimately associated with rheumatism as to warrant the assertion that four-fifths of the cardiac diseases are attributable to

rheumatism. These points in the diagnosis and clinical history are proofs of its being a *distinct disease*.

Appended is the clinical history of two cases in point:

Case I.—A man, aged 30 years, a shoemaker by trade, first became affected, two years since, with swelling, pain, and stiffness in the great toe of the left foot, which have extended to all of the larger joints. He gave, upon admission, a history of previous good health: never had fever during the progress of his disease; never had syphilis; and there is no family history of gout or rheumatism. It came on gradually. His urine is normal, bowels regular, and he has a good appetite. He has lost flesh, but is now gaining again. The hands present the peculiar distorted appearance of the disease, and there is "grating" upon motion; the large joints are alike affected, being rigid and painful upon motion. Auscultation reveals, at the base of the heart, a soft systolic murmur, which is not constant; there is no hypertrophy. He has been taking citrate of lithia and cod-liver oil; this, conjoined with baths and regulated diet, has produced favorable results.

Case II.—A French sailor, who has been in the house five days, states that he has been affected two months, giving no acute history; there is some stiffness of the smaller joints, entire absence of heart-lesions, no fever, tongue somewhat coated, pulse and temperature normal.

This patient might take, with advantage, lithia, cod-liver oil, or arsenic, internally, while he is kept at rest in bed, and leeches applied, then cold water or lead-water and laudanum applied locally. Frequently diuretics and occasional purging are useful in the early stages of the disease. If there is much weakness, quinia is given with advantage.

Later in the disease the local indications require more urgent treatment, and here iodine may be used freely, or, better, the following:

R Potass. iodid., $\mathfrak{z}\text{ij}$;
Lin. sapon. camph., $\mathfrak{f}\mathfrak{3}\text{vj}$;
Tr. belladonnæ, $\mathfrak{f}\mathfrak{3}\text{ij}$;

to be applied morning and evening.

Ammoniacal and mercurial plaster may serve a good purpose.

Internally, cod-liver oil, potass. iodid., liq. potass. arsenit., iodide of iron, and citrate of lithia, are the remedies *par excellence*. A formula now used in the hospital is—

R Effervescing citrate of lithia, gr. ij to v ;
Cod-liver oil, $\mathfrak{f}\mathfrak{3}\text{ss}$.

Arsenic is valuable; in fact, no case should be pronounced incurable until it has been tried. If the nutrition fails, the system may be supported with stimulants, as there is no contra-indication, as in gout or rheumatism: they are not to be used in the acute form of the disease, however.

Baths should be insisted upon; for this purpose tepid water and carbonate of soda may be employed, or Turkish baths may be used. Finally, a change of climate may be of service.

PHILADELPHIA HOSPITAL.

SERVICE OF DR. H. C. WOOD.

CASE OF BRIGHT'S DISEASE, WITH LEUCOCYTHÆMIA AND DISEASE OF THE BONE-MARROW.

MICHAEL F., aged 26, native of Ireland, laborer, admitted to the hospital October 5, 1873. Family healthy, to the best of his knowledge. In May, 1865, while in Baton Rouge, Louisiana, was attacked with vomiting, which occurred every day; for this he underwent treatment, but does not recollect how long this sickness lasted. No pain or other symptoms than

vomiting. Nearly two years after this, while in Indiana, he was similarly attacked; the vomiting being accompanied with cold sweats. This spell of illness lasted three or four weeks. About a year after this, he was again similarly affected. These attacks have occurred ever since, at intervals, up to the time of admission, Oct. 5.

About three days before admission he was seized with pain in left side and back, accompanied with cold sweats. About five days after admission, commenced bleeding at the nose (profusely), which has recurred three or four times, but was eventually stopped by the use of Monsell's solution.

October 22.—Four days ago the patient commenced bleeding at the gums, which still continues. There has been no vomiting since admission.

Microscopic examination of blood showed a moderate increase of the white blood-corpuscles. The urine is distinctly albuminous.

No decided enlargement of the spleen can be made out, but the axillary and inguinal glands can be felt to be somewhat hypertrophied. The general anæmia is profound.

October 28.—Bleeding from the mouth has continued, at intervals, since the last note, up to his death, which occurred last night, from exhaustion. The oozing of blood seemed to be general from all parts of the mouth.

Autopsy.—Spleen slightly enlarged; no lymphoid points visible in it; weight 9½ ounces. Pancreas abnormally hard; weight 4½ ounces. Glands of axillæ and inguinal region somewhat hypertrophied, but scarcely larger than filberts; lymphatic structure elsewhere apparently not affected. Kidneys very small, offering on microscopical examination the usual lesions of "contracted kidney."

The tibia, when sawn open, offering apparently healthy marrow, approximating lemon-yellow, and normal in appearance. The marrow of the femora dark red, presenting the general appearances seen in cases of leucocythæmia elsewhere reported by Dr. H. C. Wood. The sawn femora were handed to Dr. R. M. Bertolet, Microscopist to the Philadelphia Hospital, for examination. He reports as follows:

"DEAR DOCTOR,—The marrow of the long bones, from the case of leucæmia, after having been exposed to the air for some time, presented an unusually soft, almost fluid mass, of a grayish-red color, closely resembling in both color and consistence muco-purulent matter which has been tinged with blood.

"The microscope showed an enormous increase of the so-called lymphoid elements, which have been described by Neumann as intermediate forms between the white and red blood-corpuscles. These lymphoid elements are quite small in size. Large cells with a distinct cell-wall were also seen, containing from eight to twenty blood-corpuscles. The fully-formed red disks, although quite numerous, were less abundant than the intermediate lymphoid forms."

BELLEVUE HOSPITAL, NEW YORK.

BY W. H. FARRINGTON, M.D.

DISLOCATION OF THE SIXTH CERVICAL VERTEBRA.

R. C., æt. 45; West Ireland; domestic; admitted November 17. Family history good. Patient drinks liquor occasionally, but never to excess. About six months ago had facial erysipelas, but with this exception her health has always been excellent. About four P.M. the day preceding her admission, patient went to visit a friend residing in the lower section of the city. The husband of the latter kicked her off the stoop, quite a high one,—then knocked her into the gutter, and bent her head over on the chest so that it touched

the pavement between her limbs, kicking her also several times in the back and on the neck. She remained in this condition several moments, and was then carried to a police-station, where she remained over night, entering the hospital this morning. After the reception of her injuries she was perfectly conscious, and could speak without difficulty, but on attempting to move found herself unable to do so. On admission, patient is a stout well-nourished woman. There is no paralysis of the face or deflection of the tongue; the mind is perfectly clear; no difficulty of speech; pupils are rather contracted. There is general paralysis of the arms, legs, and body, with the following exceptions: She is able to flex both forearms, the left one the most readily. Sensation is retained on the outer side of both forearms, but not in the hand. Sensation is unimpaired also on both sides of the chest as low down as the nipples. She is unable to extend the forearm or to move the fingers. Reflex action is very slight, the great toe alone moving when the foot is pricked. Respiration is almost entirely diaphragmatic. Complains of pain in the back and in the neck, but no bruises are found, nor is deformity or crepitus evident. No point of tenderness found except in the lower portion of the neck on the right side behind. The extremities are flaccid. She has passed no urine or feces since her injury. Has constant thirst, but no sense of hunger. No difficulty in swallowing. Abdomen tympanitic. Has numbness in the hands and feet, and in the legs above the feet, but how far this extends she is unable to say. Breathes without difficulty. Physical examination of lungs is negative. Hepatic and splenic dullness masked by tympanitis, but the spleen appears somewhat enlarged. The apex-beat of the heart is about an inch below and the same distance outside the nipple. No cedema of legs. Urine 1021, acid, negative. Pulse 80; respiration 28; temperature $101\frac{3}{4}^{\circ}$.

Patient was seen to-day by Professors Wood, Janeway, Sands, and Mott, all of whom deemed it advisable not to disturb her.

Dr. Sands related a case similar to this, in which the patient died in being transferred to another ward. The diagnosis made was dislocation of the fifth and sixth cervical vertebrae. P.M.—Pulse 72; respiration 24; temperature $100\frac{1}{2}^{\circ}$.

November 20, A.M.—Pulse 84; respiration 22; temperature $101\frac{3}{4}^{\circ}$. Patient is perfectly conscious and rational; talks well. Has little or no appetite, but has constant thirst. Paralysis remains about the same. Has had no movement of the bowels since admission. Urine still has to be drawn.

November 21, A.M.—Pulse 84; respiration 20; temperature $100\frac{1}{2}^{\circ}$. P.M.—Pulse 90; respiration 28; temperature $101\frac{3}{4}^{\circ}$.

Patient has been in about the same condition all day. Is perfectly conscious still; vomits a great deal; bowels have not yet moved.

November 22.—Condition unchanged.

November 23, 8.30 A.M.—Temperature 108° ; stertorous respiration; inability to speak; contraction of the pupils. Patient is rapidly sinking. Paralysis as before. Vomits up a dark coffee-ground material.

12 noon.—Temperature 107; has had a few light-colored loose stools.

1.45 P.M.—Patient died.

Autopsy by Dr. Janeway.

Exterior.—A well-nourished woman. No ecchymoses on the body. On making an incision through the skin to open the spinal column, a clot of blood is found in the dorsal region on the fascia covering the erector spinæ muscles, and also around the lower cervical vertebrae.

Vertebral Column.—The sixth cervical vertebra is dislocated forward on the seventh; the intervertebral

cartilage is ruptured, and the anterior common ligament somewhat torn; the ligamenta subflava torn on both sides, and the articular processes separated so that those of the sixth are carried in front of the seventh. Very little clotted blood on the dura mater, which is not torn.

Lungs.—Marked hypostatic congestion.

Heart.—Slight calcification at the base of one leaf of the aortic valves. Other organs are normal.

ANEURISM OF THE THORACIC AORTA RUPTURING INTO THE SUPERIOR VENA CAVA.

C. D., æt. 61; West Ireland; domestic; admitted September 18, 1873. Father died of old age, and a brother of heart-disease. Patient has been in the habit of moderate indulgence in ale and gin. No history of venereal. Had an attack of acute articular rheumatism seventeen years ago, but with this exception her health has always been good.

About one year ago, patient noticed a small tumor in the right side of the chest, near the sternum, whose development appears to have taken place without pain. She has been required by her occupation to make straining efforts in lifting heavy baskets of clothes, but knows of no further cause. About two months after its first appearance she experienced sharp pain running down the inner side of the arm to the elbow, and occasionally acute pain in the chest in the region of the tumor, but has not had any dyspnœa. These pains have persisted up to the present time. Her voice has been hoarse for several months past, but she has not had cough for the last eighteen months.

On admission, patient is an exceedingly nervous woman, of moderate nourishment. Complains principally of a tumor in the chest. Has no pain here at present. Appetite good, bowels regular, and tongue natural. Pulse natural in frequency, short and sharp in stroke, with no evident difference in the radial pulsation on either side. No difference in size of pupils. Respiration accomplished without difficulty. No cough. Voice rather hoarse, but no other symptom of laryngeal disturbance. Chest-examination reveals the presence of a pulsating tumor on the right side of the sternum, extending from the second rib downward as far as the fourth, and about three inches outwards from the right border of the sternum. Dullness on percussion exists, and a marked heaving impulse and thrill on palpation. A double murmur is heard with greatest intensity over the tumor, transmitted into the vessels of the neck. Of these the diastolic is heard most distinctly; apex-beat of heart in the fifth interspace on the mammary line; a systolic murmur heard at the apex. Lungs appear to be normal. Ordered rest in bed, and potass. iodid., gr. x, three times daily.

November 15.—General condition unchanged. Physical examination reveals some increase in size in the tumor. Complains only of slight occasional pain in the chest.

December 2.—Up to the present, patient does not appear to have suffered from dyspnœa. At 2 P.M. she was carried on a stretcher to a clinic in the hospital amphitheatre. She was, as usual, highly excited. While returning to the ward she was noticed to be deeply cyanosed, and to suffer great dyspnœa. Extremities cold, pulse small and rapid. 5 P.M.—Patient feels somewhat better, but her dyspnœa and cyanosis persist, as well as the coldness of the extremities, but in a less degree. 10 P.M.—Patient has had an attack of nausea and vomiting. Symptoms much worse than before. Pulse feeble and accelerated. She is exceedingly restless. To quiet this, sol. morph. Magend., \mathbb{W} vi, are administered hypodermically, with temporary relief.

December 3, 5.30 A.M.—Patient continued in about

the same condition during the night, and at this hour died.

Autopsy by Dr. Janeway.

Brain and membranes normal.

Thorax.—An aneurismal sac of the size of an apple arises from the aorta at the junction of the ascending and transverse portions. It projects forwards and to the right; has eroded the second costal cartilage and destroyed the intercostal muscle of the second interspace. The aneurism compressed the vena cava descendens; and at the point of junction of the right and left innominate veins on the inner wall of the vena cava a transverse slit is found, one-half inch in length, serving as a communication between the aneurism and the vein. The former is attached to the upper lobe of the right lung.

The aorta is diseased throughout its course by chronic endo-arteritis. In the descending aorta a true aneurismal sac exists, pressing against the upper lobe of the left lung, to whose pleura it is adherent.

Heart.—Aortic valve thickened and slightly insufficient. Calcareous plate at the base of the mitral; no hypertrophy; walls normal.

Spleen normal.

Kidneys rather smaller than usual, with commencing granular degeneration.

TRANSLATIONS.

IMPORTANCE OF GELATIN IN NUTRITION.

VOIT, Bischoff, and Fr. Hofman ascertained, by a series of experiments on dogs, that the addition of gelatin to the food always reduces the consumption of albumen. This effect is observed when large as well as when small quantities of meat are fed at the same time with the gelatin. Particularly when meat is given sparingly, gelatin serves to economize albumen to a much greater degree than fats and carbohydrates. The amount of albumen which is thus saved is in proportion to the amount of gelatin given. Still, an appreciable quantity of albumen is constantly consumed, even when a large excess of fat is added. Fat and gelatin together decrease the consumption of albumen more than gelatin alone.

Gelatin is quickly decomposed after being absorbed in the alimentary tract. The experiments demonstrated that a deposit of gelatin in any one of the organs is not possible. Gelatin can therefore substitute only a portion of the requisite albumen, and not all of it. Gelatin cannot even take the place of the tissues producing it, since these originate from albuminous substances.

Voit has explained at some length his conception of the differences between the two varieties of albumen found in the human body, which he distinguishes as organic and circulating albumen. The former is a constituent of the tissues, and is decomposed with difficulty, while the latter occurs in the circulating fluids and is readily converted. The fact that neither gelatin, nor fats and carbo-hydrates, are able to prevent the conversion of albumen completely, is most readily explained by their inability to replace organic albumen and to form organs and tissues. No new blood-corpuscles to take the place of those which have been destroyed, no new muscular fibre, nor even a tissue producing gelatin, can be formed from gelatin itself. But when gelatin alone is given, a smaller amount of the organic albumen is transformed into circulating, or albuminose, so that the organism loses less albumen than it would otherwise do.

When gelatin is administered in conjunction with a little albumen, the consumption of organic albumen is very much reduced. Gelatin with an excess of albumen increases the amount of organic albumen in the tissues. Gelatin is subject to conversion, in a manner similar to albuminose, and saves albumen on account of being more readily decomposed than organic albumen.

As gelatin cannot substitute organic albumen, but only limits the conversion of the latter into albuminose, in place of which it is itself decomposed, an animal cannot be supported on it for any length of time, from want of albumen, even when fats, carbo-hydrates, and salts are given in sufficient amounts. Gelatin is, consequently, not properly a nutrient; but still it serves the purposes of nutrition in an indirect manner. It differs from other alimentary bodies in not being able to substitute any one of these completely, while fat and carbohydrates can entirely prevent the waste of fat, and while each inorganic constituent has the property of substituting itself.

Gelatin is not a plastic aliment in the old acceptance of the term, as it takes no part in the elaboration of the tissues. Even as a respiratory element it is of very slight importance, no more, in fact, than was formerly accredited to albumen. But on account of the facility with which it is decomposed in the body, it serves a useful purpose in economizing both albuminose and albumen. Its action in this respect is similar to that of fats and carbo-hydrates, but its effects are much more marked. In addition, gelatin was found to prevent the destruction of a small amount of fat. *Zeitschrift für Biologie*, 8th vol., 3d no.—*Chem. Techn. Mittheilungen von Elsner. Industrieblätter von Hager u. Jacobsen.*

ADOLPH W. MILLER, M.D., PH.D.

PREPARATION OF KOUMYS.

H. & N. SCHULTZE, of Berlin, give the following formula. Unskimmed cows' milk is mixed with a sufficient amount of sugar of milk to produce in the course of the subsequent fermentation in closed vessels a carbonic acid gas pressure of four atmospheres. Fermentation is induced by the addition of brewer's yeast, which has been thoroughly washed. The operation is commenced in open tanks, in which the mixture must be frequently stirred. One-half of the casein, which is separated, is to be skimmed off. While the fermentation is actively progressing, the preparation is drawn off into champagne-bottles, the corks of which must be securely tied down by string or wire. They must then be removed to a cool locality, so that the fermentation can be properly completed. Three varieties of koumys are prepared, which differ in the amount of carbonic acid gas with which they are impregnated; they result from varying the proportion of sugar of milk, which is originally added.

C. Schwalbe makes koumys from condensed milk in the following manner. 100 c.c. are dissolved in a small amount of cold water; 1 gramme of lactic acid and $\frac{1}{2}$ gramme of rum are added, and the mixture is diluted with sufficient water to make it measure 1000 to 2500 c.c. This preparation is put into a Liebig's bottle and charged with carbonic acid gas. The bottle is to be kept in a warm room, and to be examined after three or four days. When there is an active evolution of froth, and when the curd is of a fine, granular consistence, the koumys is in the proper condition. It can then be kept for about eight days.—*Deutsche Industriezeitung*, p. 438, *Chemisches Centralblatt*, p. 568.

ADOLPH W. MILLER, M.D., PH.D.

PHILADELPHIA
MEDICAL TIMES.
 A WEEKLY JOURNAL OF
 MEDICAL AND SURGICAL SCIENCE.

The Philadelphia Medical Times is an independent journal, devoted to no ends or interests whatever but those common to all who cultivate the science of medicine. Its columns are open to all those who wish to express their views on any subject coming within its legitimate sphere.

We invite contributions, reports of cases, notes and queries, medical news, and whatever may tend to increase the value of our pages.

All communications must bear the name of the sender (whether the name is to be published or not), and should be addressed to Editor Philadelphia Medical Times, care of the Publishers.

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EDITORIAL.

THE ZERO OF WORTHLESSNESS AND THE
 ACME OF EXCELLENCE.

IT is said that misery makes strange bedfellows; but no stranger contact can be seen than occurs in some of the crowds after an exciting and critical election, when the millionaire hustles, or is hustled by, the pauper or the rag-picker, whose bosom swells for once with pride, because he has just exercised the inalienable right of an American,—the right of suffrage,—whose being is to itself glorified by the thought that its printed decision bears as much of power as does that of the mightiest intellect or of the profoundest statesman in the land. Often does the book-shelf remind us of an election crowd; and to-day Dives and Lazarus, wisdom and ignorance, honor and disgrace, it seems to us, are represented by two books which now jostle each other on the table before us. Of course it is not necessary to tell any of our readers what book we refer to as Lazarus. We opine that if in any intelligent medical circle of the land allusion should be made to an unnamed book as the national disgrace, nine out of ten of those present would know it was the Transactions of the American Medical Association which was referred to. Yet, like Paul, let us take courage; let us praise the noble band of censors, the publication committee: the book is some three hundred pages shorter than its next elder brother. Let us trust that next year a publication committee may be found possessed of suffi-

cient "back-bone" to declare that nothing that is not of real scientific interest shall go into the volume, and that power be granted them to carry out the determination. What a saving of funds would there be! What a loss to friend Collins, the printer! Surely the title-page would be the sole solace left to him.

Dives is a book* well known to our readers, and of which every American ought to be proud. When the learned author of the work passed away, probably all of us feared lest the book should not maintain its place in the advancing science whose terms it defines. Fortunately, Dr. Richard J. Dunglison, having assisted his father in the revision of several editions of the work, and having been, therefore, trained in the methods and imbued with the spirit of the book, has been able to edit it, not in the patch-work manner so dear to the heart of book-editors, so repulsive to the taste of intelligent book-readers, but to edit it as a work of the kind should be edited,—to carry it on steadily, without jar or interruption, along the grooves of thought it has travelled during its lifetime. To show the magnitude of the task which Dr. Dunglison has assumed and carried through, it is only necessary to state that more than six thousand new subjects have been added in the present edition. Without occupying more space with the theme, we congratulate the editor on the successful completion of his labors, and hope he may reap the well-earned reward of profit and honor.

IT affords us much pleasure to state that Dr. Barnes, Surgeon-General U.S.A., was recently elected, by a vote of forty-two out of forty-six, a corresponding member of the Academy of Medicine of France. We are sure that this announcement will be highly gratifying to every American physician and surgeon. Considering the great services which Dr. Barnes has rendered to his country by the creation of the most magnificent military museum in the world, and the publication of the Medical and Surgical Memoirs of the Late War, the most copious and complete ever issued by any people, such a compliment was well deserved, and reflects great credit alike upon France and the United States. We are informed that the announcement of the election of the Surgeon-General came, very appropriately, from Baron Larrey, who accompanied it with some highly complimentary expressions.

* A Dictionary of Medical Science. By Robley Dunglison, M.D. A new edition, by Richard J. Dunglison, M.D. Henry C. Lea, Philadelphia, 1874.

CORRESPONDENCE.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES.

IN the report of a case of malignant disease of the ear, with paralysis of some cranial nerves, in one of your late numbers, a considerable degree of hypertrophy of the corresponding side of the tongue was recorded among the symptoms. It was found so difficult to offer a rational explanation for this, that the possibility of a congenital malformation of the tongue was suggested.

In Dr. C. W. Burnett's very interesting and valuable report on the progress of otology, just published, I find an observation on the physiology of the chorda tympani which I had not met with before, and which throws some light on this singular phenomenon. Some experiments performed by Vulpian show that "the fibres of the chorda tympani which accompany the lingual nerve in its distribution to the tongue have the same influence on the vessels of that organ, *i.e.*, direct dilating influence, which the fibres of the chorda tympani possess over the submaxillary gland, as already proved by Cl. Bernard."

If we suppose that a more or less prolonged irritation of the chorda tympani preceded its final paralysis, this dilating effect upon the vessels affords an explanation of the hypertrophy of that part of the tongue to which the fibres of this nerve are distributed.

G. C. H.

PROCEEDINGS OF SOCIETIES.

BIOLOGICAL AND MICROSCOPICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES.

NOVEMBER 3, 1873.

DIRECTOR W. S. W. RUSCHENBERGER, M.D., in the chair.

PRESENT—Messrs. Tyson, I. Norris, J. G. Hunt, Wells, Schaeffer, Buckingham, McQuillen, Allen, and Richardson.

Dr. JAMES TYSON exhibited some beautiful specimens of echinococci removed from a cyst the size of a hen's egg in the liver of a patient who died recently in one of his wards of the Philadelphia Hospital. Dr. TYSON remarked this was the first case of perfect echinococci from an hydatid cyst that he had ever seen. The *Tænia echinococci*, a small, short tape-worm composed of four joints (which develop from these echinococci), only reaches its full growth and acquires reproductive powers in the bodies of the dog and wolf. The larval cysts are each furnished, as the specimen showed, with thirty-four hooklets arranged in a circle around the mouth, and each attached originally by a sort of fleshy stem or peduncle to the membrane, forming the inner layer of the parent cyst-wall, which to the naked eye appears covered with minute granules, every one of which is found to be an echinococcus.

Dr. J. GIBBONS HUNT showed for comparison an hydatid cyst with fully-developed larvæ, from the body of a rabbit.

In reply to a question, Dr. TYSON observed that among the specimens upon the table, one in which the larvæ were mounted in glycerin showed the character-

istics in the most satisfactory state of preservation, while those put up in creasote-water soon become putrid.

Dr. HUNT inquired if any positive explanation could be given as to the way they found entrance into the liver.

Dr. TYSON replied that they probably bored their way into that organ after perforating the stomach, into which they enter with other ingesta, as is known to be the case with the *trichina spiralis*.

Dr. J. G. RICHARDSON suggested that, since these parasites were so common in the liver and rare in the spleen and pancreas (which also adjoined the stomach), perhaps ova of the *tænia* after being swallowed were taken up by the blood-vessels of the intestinal villi, and, being conveyed by the portal vein to the liver, and there filtered out as it were, thus owed their position to the blood-current in the portal circulation.

Dr. J. G. HUNT observed that he had found the best way to display the hooklets was to decapitate the echinococcus and then illuminate the head by the aid of polarized light.

Dr. J. H. MCQUILLEN exhibited a left superior central incisor tooth, the crown of which was bent at right angles with the root, and remarked that the specimen had been sent to him by J. M. Comegys, M.D., of St. Albans, Vermont, with the following history: The patient from whom the tooth was removed, when a child four years of age, fell and knocked out the left superior deciduous incisor, sustaining at the same time some injury to the surrounding parts. Several years passed over, and all the permanent teeth, with the exception of the left superior central incisor, made their appearance in due time, but, being very defective in structure, they were removed and an artificial denture inserted. After wearing these a short period, the patient noticed a fungous growth of the gum near the centre of the upper jaw, and on incising this a hard substance was found, which was pronounced to be a portion of the alveolar process. Suffering continued annoyance from this protuberance, the patient called upon another operator, who (also regarding it as a piece of the alveolar process) made an unsuccessful attempt to remove it; and, at last, the patient eventually coming under the care of Dr. Comegys, he extracted it. The specimen is unique, and illustrates a condition denominated by Mr. John Tomes "Dilaceration." The history of this case manifestly affords strong support to the position assumed by Mr. Tomes,—to wit, that the peculiar relation which the crown bears to the root is due to the fact that, by mechanical violence at a period when the crown of the permanent incisor was partly calcified, its position in the jaw was changed so that it was turned outwards or inwards, there to remain in a state of rest, whilst, the pulp being uninjured, the development of the tooth continued after the accident, with a permanent displacement of the crown. Prof. Wedl, of Vienna, objects to the term "dilaceration," suggesting in place of it flexion or torsion of the crown, and states that in cases which came under his notice the patients did not remember having sustained any injury of the jaw by falls or blows. Such accidents, however, may have occurred, and afterwards escaped their recollection.

Dr. MCQUILLEN cited a case which had come under his own immediate notice, in which a child four years of age, playing about a room, fell and struck her right superior maxilla with considerable force against the edge of a table, cutting through the outer plate of the alveolus. Sixteen years have elapsed since the accident, and the right superior canine tooth has failed to make its appearance. A very decided protuberance exists, however, on the inner margin of the alveolar process, opposite the vacant place of the tooth, which he has reason to believe is due to the presence of the

crown of the unerupted canine, whose position it is reasonable to infer was forcibly changed at the time of the accident.

A large plaster model, used for class demonstration to illustrate dilaceration of the crown of an incisor, was exhibited, and he then placed under one of the microscopes a longitudinal section of a dilacerated incisor, prepared by Dr. George S. Allan, of New York.

In this specimen the dentinal tubuli at the neck of the tooth, where the bending occurred, presented a marked crimped or crenated appearance.

Dr. MCQUILLEN also exhibited two valuable and interesting specimens received from Dr. R. R. Andrews, of Cambridge, Massachusetts; one of them displaying blood-vessels in the dentine of a molar tooth; the other being a human embryo of the age of twenty-nine days.

Dr. HARRISON ALLEN narrated the post-mortem appearances of a malformation of the kidney, occurring in a case which he had recently observed. The peculiarity consisted in an elongation of the organ, and its being furnished with two ureters, which took their origin from the upper and lower portion of the hilum at a distance of about one inch apart, and, gradually converging, entered the bladder within about one-eighth of an inch of each other.

Dr. ALLEN remarked that this abnormality was entirely ignored by several high authorities, Henle alone mentioning it, and although he states it is not so rare as to be anything of a curiosity, yet it would seem to be at least quite unusual.

Dr. J. G. HUNT exhibited three specimens of the larvæ of *Anthonia* (a species of fly), which had been passed from the human intestine, and whose appearance might have caused considerable anxiety if they had remained unrecognized.

He also displayed an entire leaf of *Limnanthimum lacunosum* (one of the *Gentianaceæ*), showing curious radiating cells somewhat resembling the bone-corpuscles, but very much larger, and quite unlike those of any other vegetable tissue. During the existence of the plant these cells ordinarily contain bubbles of air, and perform the part of minute life-preservers by supporting the leaves upon the surface of the water.

REVIEWS AND BOOK NOTICES.

A PRACTICAL TREATISE ON THE DISEASES OF THE EAR, INCLUDING THE ANATOMY OF THE ORGAN. By D. B. ST. JOHN ROOSA, M.A., M.D. Illustrated by Wood Engravings and Chromo-Lithographs. New York, William Wood & Co., 1873.

"This work is intended to be a guide to those who wish to treat diseases of the ear."

These are the words which open the preface to this very valuable work; and, after a careful examination, we believe the intention of the author has been ably carried out. The work contains five hundred and thirty-five pages, and is divided into four parts, which treat respectively of the external ear, the middle ear, the internal ear, and deaf-mutism and hearing-trumpets. There is also a very interesting and accurate history of the progress of otology from the year 460 B.C. to the present time, which precedes the description of the anatomy of the auricle and external auditory meatus.

The directions for examining aural patients are very explicit, and the chromo-lithographs illustrative of the appearance of the membrana tympani are exceptionally good. The perspective of the lithographs in this work is strikingly brought out by viewing them through any short tube, but preferably with the ordinary aural speculum.

Otitis parasitica, a disease which appears to be more common than heretofore supposed, is thoroughly explained by accurate wood-cuts and a fully-condensed experience of authors on this topic.

The chapter on Injuries of the Membrana Tympani shows that, although many injuries to this part of the ear arise from unavoidable causes, unskilled manipulation on the part of the laity, in their anxiety to relieve the patient, may perforate or destroy this delicate membrane, which might have been saved had the surgeon been called upon for relief. The chapters of this work which contain the author's experience and views upon chronic non-suppurative inflammation of the middle ear are the prominent feature of this treatise. The author divides the so-called chronic catarrh of the middle ear, or chronic non-suppurative inflammation of the middle ear, into—1, *chronic catarrhal inflammation*, and, 2, *proliferous inflammation*. The latter term is original with the author, or rather it is, as Dr. Roosa says, an original translation of the German word *Wucherung*.

This endeavor of the author to differentiate the forms of chronic disease of the middle ear is in perfect harmony with similar endeavors of Politzer, Gruber, Weber-Liel, and others; the first-named of whom divides chronic catarrhal diseases of the middle ear into secretory and non-secretory forms; the second authority has described an otitis media hypertrophica; and the last-named writer has recently published his well-known work "On the Nature and Remediability of the Most Common Form of Progressive Hardness of Hearing," which malady, he says, cannot be referred to catarrhal causes, but even as a primary disease must be considered as a disease of the structures of the middle ear dependent upon "affections of the nerves which supply, and which stand in close relation to, the middle ear." In this attempt on all sides to describe a separate chronic disease of the middle ear, based upon a special group of pathological alterations of the component parts of the tympanum, we recognize the fact that there is a frequent form of deafness which cannot be referred to catarrhal causes at all. Therefore Dr. Roosa endeavors to describe "a form of inflammation which shows a higher formation than the catarrhal," and, while admitting that catarrhal symptoms may precede this form of disease, he shows that there is a disease of the ear which tends towards a chronic progress, and which he has "ventured to designate the *proliferous form*."

These views of the author are based upon twelve varieties of tissue-changes which have been frequently found as a consequence of this form of ear-disease, and in them we find that the prominent feature of the pathological processes is the formation of new tissue; and it is this fact that has induced and really warrants the application of the word "proliferous" to this form of ear-disease.

In the chapter on the Treatment of Chronic Non-suppurative Inflammation of the Middle Ear, Dr. Roosa says, "In one respect the treatment of the catarrhal may be fairly distinguished from that of the proliferous form. In the catarrhal form we must give a great deal of attention to the naso-pharyngeal space, while in the other we need to pay very little to it." With this exception, the outline of treatment for both forms of the disease may be the following: constitutional and hygienic, local blood-letting, applications to the Eustachian tube, applications to the cavity of the tympanum, and cutting operations upon the membrana tympani and the ossicula.

Under the head of the nasal douche the author expresses his views against its use, since he has found it to be "sometimes a troublesome and dangerous appliance."

This surely will be the case if the instrument is im-

properly used; but if the fluid injected into the nares be warm, if the vessel containing the fluid be not higher than the patient's forehead, and if after using the douche the patient do not leave his room for at least fifteen minutes, we have yet to hear of any accident such as Dr. Roosa depicts.

It is not stated, in the table which is given by the author to show the danger of the application of the nasal douche, whether *all* these rules were observed; and, although it is implied that they were, still it is not clearly shown, for the instructor in the use of the douche in thirteen cases of the sixteen unfortunate ones is either unnamed or "unknown," and in several cases the nature and temperature of the fluid injected are also "unknown," except in one case,—that of Dr. Frank,—in which it is distinctly admitted that the injected fluid was cold; and, as we are prepared to hear, the result was an acute otitis media.

We cannot admit, as Dr. Roosa does, the statement that "the instructor in the use of the douche was a physician" as a sufficient guarantee of the correctness of the instruction," for our experience shows that as a rule the patients have failed to receive *all* of the aforesaid precautions. And even if the physicians who instruct the patients in the use of the douche give proper instruction, the patients themselves may fail to follow their directions. It is obvious where the blame rests in such cases.

Operations upon and through the membrana tympani, which now form some of the most important operations in surgery, are illustrated by history, cases, and woodcuts of the various instruments employed, from "Cheselden's experiments on dogs to Weber-Liel's operation upon the tensor tympani muscle."

At the end of the fourteenth chapter we find a table showing the results of treatment of chronic non-suppurative inflammation of the middle ear, based on the observations of four observers, of whom Professor Roosa is one. In commenting on this table, Professor Roosa says, "I can only account for the fact that my percentage of cures is less than the others from the supposition that I have seen a proportionately larger number of neglected cases than falls to the lot of other practitioners."

We note, however, that the percentage of *improvement* in our author's cases is greater than that of the others. Dr. Roosa also states that he has made the standard of cure very high, and has not called a case "cured" which has only been greatly improved.

The chapter on Acute Suppuration of the Middle Ear serves to mark an era in the treatment of disease in general. Our author, firmly supported by the experience of modern otology, shows that the treatment of this form of ear-disease is not only rational and successful, but is demanded, by the exigencies of the case and the evils of neglect, from every intelligent and conscientious physician. If any one should doubt the desirability of treatment in acute otitis media, he has but to peruse the chapter on Chronic Suppuration of the Middle Ear and its fatal consequences, in order to have a good reason for changing his opinion.

"The general health of a patient affected with chronic suppuration of the middle ear is usually impaired, even if none of the serious consequences have occurred. Such a drain is not tolerated with equanimity by nature."

"Dr. Hackley has found albuminuria in a number of cases of chronic suppuration of the middle ear, where there was no apparent cause for the disease except the long-continued secretion of pus from the tympanic cavity."

One hundred pages are devoted to a consideration of the consequences of chronic purulent discharges from the tympanum, and the treatment in these very grave cases.

To this portion of the treatise Dr. Roosa has appended a table, "compiled from various sources, which illustrates in a striking manner the fatal consequences of some cases of aural disease."

The portion of the work which treats of the middle ear and its diseases closes with these words, in reference especially to the table of cases already alluded to: "Taken in connection with the fact already stated, that suppuration of the ear is more frequently the cause of cerebral abscess than any other one disease, these cases form a complete justification, if one were needed, for the giving up so much space to the consequences of chronic suppuration of the middle ear. If the table should startle some mind hitherto inattentive to this subject into a realization of its grave importance, and lead to a more careful consideration of an ulcerated middle ear, it will have accomplished its object." The remaining pages of the book are devoted to the anatomy and diseases of the internal ear, and to deaf-mutism and hearing-trumpets.

True nervous deafness, "a primary affection of the auditory nerve or labyrinth, or of both," is said to be a rare disease. In fifteen hundred cases of aural disease observed by the author, only fifty-seven could be fairly considered as primary diseases of the internal ear.

In alluding to hearing-trumpets, the conclusions are that the simpler tubular apparatus are the best, but the small "invisible tubes placed in the auditory canal are wholly useless." We close this notice with a hearty recommendation to all interested in diseases of the ear to peruse this work.

C. H. B.

GLEANINGS FROM OUR EXCHANGES.

THE ELASTIC LIGATURE (*British Medical Journal*, November 29, 1873).—On the 21st instant, Sir Henry Thompson demonstrated, for the first time in England, a surgical procedure which has been practised for some time past by Professor Dittel, of Vienna. It consists in substituting an innocent-looking elastic thread for the formidable array of knives, tourniquets, artery-forceps, and other paraphernalia with which the surgeon ordinarily approaches the patient. Before proceeding to perform the operation, Sir Henry related the curious accident by which Professor Dittel was first led to appreciate the extraordinary results which may be produced by the slight yet continuous pressure of a simple elastic thread. He was called to see a girl about eleven years of age, who was suffering from acute and severe but somewhat anomalous brain-symptoms. The case was altogether obscure; the girl seemed in other respects healthy, but could give no account of herself,—she was, in fact, at the point of death,—nor could any satisfactory history be obtained from her friends. The attack soon proved fatal, and Professor Dittel made a necropsy. It was then found that the india-rubber band of the hair-net which she was wearing had ulcerated through the whole thickness of the calvarium, and had set up meningitis. On further inquiry, it was ascertained that the girl, having been constantly scolded by her stepmother on account of the untidy state of her hair, had, about three weeks before her illness, purchased an ordinary hair-net, and the elastic thread of this net, tied round the head and worn day and night, had, in less than a month, cut through skin and bone and penetrated to the brain, and this apparently without causing any pain to the patient.

Professor Dittel at once proceeded to reduce to practice the ideas suggested to him by this unfortunate accident. He first applied it to a case of nœvus of the scalp in a child; then, finding that the plan quite answered his expectations, he applied it to the removal of the tes-

ticle, penis, etc., and finally to the amputation of limbs. He has now performed, by means of the elastic ligature, a large number of operations of all kinds, including five amputations of limbs. It is not understood, however, that he proposes to apply his method to the performance of the larger amputations: these were done rather with the view of testing the capabilities of the process. The time required for the completion of an operation varies according to the amount and density of the tissues which have to be divided: *e.g.*, for the separation of the mamma from eight to twelve days are required.

The chief advantage which Dr. Dittel asserts this plan to possess is, that patients so operated on are less liable to pyæmia than those treated in the ordinary way. He bases this assertion on the experience of the numerous cases referred to above. Remembering also what a morbid dread of the knife many nervous patients have, the depressing mental effects of an operation may often be greatly diminished. Lastly, the operation itself is absolutely bloodless.

Among the operations for which it is admirably adapted may be specially mentioned *fistula in ano*, which Dr. Dittel now invariably treats in this way. One end of the india-rubber thread is passed in the eye of a probe up the sinus into the bowel, then caught, brought out at the anus, and tied; it cuts out in a few days.

The patient on whom Sir Henry Thompson operated was a stout, middle-aged woman, who was suffering from an ulcerating fibro-cystic tumor (cystic sarcoma) of the right breast. She had had a lump in the breast for twenty years, but it caused her little inconvenience till two years ago, when it began to enlarge rapidly, and finally the skin over it gave way. At the time of the operation, the tumor was of the size of a large orange, and somewhat pendulous, the breast itself being wasted; it was crowned by a large, sloughy, fungating ulcer. The ligature used was tubular, about one-twelfth of an inch in diameter, the calibre of the tube being about one-third of this. A large nævus-needle was threaded with this and with a piece of twine (the use of which was explained afterwards) and passed under the base of the tumor; the elastic was then cut, the needle withdrawn, and the halves of the pedicle tied separately.

Sir Henry Thompson remarked, after the operation, that, although this was a very suitable case for the method adopted, it was not a severe test. The only accident that could happen was the snapping of the elastic when stretched; in that case, another length was tied to the twine, which had been passed under the tumor with the elastic and drawn by it along the track of the needle; otherwise, the twine was removed as soon as the ligatures had been properly tied. The best way to avoid the occurrence of this accident was always to use freshly-prepared elastic; if kept only a month, it was very liable to become brittle.

The skin over the tumor should be tightened just before tying, so that as little as possible might be included. Sir Henry added that, as that was the first time he had operated by that method, he had been anxious to conform in all respects to the practice of Dr. Dittel; but he thought that at another time he should be disposed to make a superficial incision through the skin along the course of the ligature, so that it would be in a groove and would not be liable to slip. He thought also that this would obviate the pain which Dr. Dittel said, that patients sometimes experienced during the first two or three hours after the operation; in most cases, however, the pain was slight. This patient complained of pain, apparently not very severe, for about twenty minutes after she recovered from the chloroform. Dr. Dittel's paper in the *Allgemeine Wiener Medicinische Zeitung*, 1873, has furnished very full details respecting this mode of treatment.

INTUSSUSCEPTION (*The Medical Press and Circular*, November 26, 1873).—Mr. Jonathan Hutchinson details a successful case of abdominal section for the relief of intussusception.

The patient was a child, aged two years. The intussusception had commenced at the cæcum, and was of such length that its extremity, presenting the inverted ileo-cæcal valve, was extruded several inches at the child's anus. The condition had been one month in course of development; latterly the case had been treated as one of prolapsus, and attempts had been made to keep the bowel in place by means of a cork pad. Efforts to effect reduction by enemata having failed, the child was put under chloroform, and the abdomen was opened in the middle line below the umbilicus. The intussusception was then easily found, and as easily reduced. The after-treatment consisted only in the administration of a few mild opiates, and the child made a rapid recovery.

In three other similar cases the intussuscepted bowel could be easily felt by the finger in the rectum, and in all three, in spite of persevering treatment by injections, bougies, etc., the patients had died unrelieved. From the consideration of a considerable number of cases bearing upon the diagnosis and treatment of similar lesions, Mr. Hutchinson comes to the following conclusions:

1. That it is by no means very uncommon for intussusception to begin at the ileo-cæcal valve, and to progress to such a length that the invaginated part is within reach from the anal orifice, or even extruded.

2. That the prognosis of cases of intussusception varies much; first, in ratio with the age of the patient, and secondly, with the tightness of the constriction.

3. That in a large proportion of the cases in which children under one year are the patients, death must be expected within from one to four or six days from the commencement, and is usually caused by shock or by collapse from irritation, and not by peritonitis.

4. That in many cases it is easy, by estimating the severity of the symptoms (vomiting, constipation, etc.), to form an opinion as to whether the intestine is strangulated or simply irreducible.

5. That in cases of strangulated intussusception, whilst there is great risk of speedy death, there is also some hope that gangrene may be produced, and spontaneous cure result.

6. That in cases in which the intussuscepted part is incarcerated and not strangulated, there is very little hope of the occurrence of gangrene, and it is probable that the patient will, after some weeks or months, die, worn out by irritation and pain.

7. That the chances of successful treatment, whether by the use of bougies or by the injection of air or water, are exceedingly small, excepting in quite recent cases; and that if the surgeon does not succeed by them promptly it is not likely that he will succeed at all.

8. That the cases best suited for operation are those which have persisted for some considerable time, and in which the intestine is only incarcerated; and that these cases are also precisely those least likely to be relieved by any other method.

9. That in such cases, after failure by other means, an operation is to be strongly recommended,—the only circumstances likely to cause difficulty being (1) tightness of the impaction of the parts, (2) the existence of adhesions, and (3) the presence of gangrene.

10. That in very severe cases, or where the stage is greatly advanced, it may be wiser to decline the operation and trust to the use of opiates.

11. That the operation is best performed by an incision in the median line, below the umbilicus.

12. That in cases of intussusception in young infants (under one year of age) the prognosis is very desperate,

scarcely any recovering excepting the few in whom injection-treatment is immediately successful, whilst a large majority die very quickly; and that this fact should be held to justify a very early resort to operation in such cases.

SUBCUTANEOUS DIVISION OF THE NECK OF THE FEMUR FOR BONY ANCHYLOSIS OF THE HIP-JOINT (*New York Medical Journal*, December, 1873).—Dr. H. B. Sands reports the case of a man upon whom he has operated successfully for bony anchylosis of the hip-joint. The patient was twenty-five years of age, of fair constitution but somewhat irregular habits, and had suffered from a severe attack of articular rheumatism four years previous to the time of the operation. The right hip-joint was kept in a flexed position during convalescence, and subsequently remained rigid, the thigh being considerably abducted, and flexed on the pelvis at an angle of 110° to the vertebral column. The patient could not rest the right foot on the ground without assuming a crouching attitude, and could not walk without crutches.

The rigidity being found to be due to true anchylosis, the following operation was performed. A long, straight, narrow bistoury was thrust through the soft parts just above the great trochanter, and carried directly in front of the cervix femoris, so as to separate the soft parts from this aspect of the bone. A narrow saw was introduced along the track made by the knife, and the neck of the femur divided. It was then found necessary to sever the tendons of the adductor longus and the tensor vaginæ femoris, after which the thigh was immediately and readily extended to a right line with the body, and kept there by a weight attached to the foot; the patient being put to bed and confined there for six weeks, in the hope of obtaining bony anchylosis in the straight position. As it was found at the end of that time that the parts remained freely movable, he was permitted to get up and move around on crutches. There was a shortening of a quarter of an inch. He now walks quite well and steadily with a cane, a useful and satisfactory false joint having resulted.

INTRA-RECTO ABDOMINAL EXPLORATION (*The Medical Record*, December 1, 1873).—At a meeting of the New York Academy of Medicine, Dr. Charles Leale detailed a case in which he had raised a patient from a condition of profound narcotism from chloroform-poisoning by manual irritation of the solar plexus, the hand having been introduced through the anus and rectum. This treatment had been suggested by the results obtained in a case of like character from the use of electricity over the region of the solar plexus for the purpose of increasing the force of the respiration.

Dr. Benjamin Howard was not sure but that the same effect might have been produced by striking sharply upon the epigastrium where we can come into close proximity to the solar plexus; he thought that, although admissible, the use of both electricity and internal abdominal exploration for the purpose of irritating the solar plexus of nerves as a means of resuscitation should only be employed as a *dernier ressort*.

He was of the opinion that this method of examination promises to be an exceedingly valuable one in the diagnosis of tumors and displacements of the uterus, ovarian tumors, etc., and especially in the case of a stricture at the sigmoid flexure of the colon, where so much more can be learned by the touch than in any other way. It has, however, been followed by a strong tendency to incontinence of feces, and there are cases recorded in which perforation of the bowel and death have resulted from its employment.

Dr. Peaslee would place a check upon the indiscriminate use of this method of exploration. It is justifiable when a differential diagnosis is to be made between a

fibroid cyst of the uterus and an ovarian tumor, or between the latter and a tumor coming from above, as an enlarged liver or kidney.

STYPTIC COLLODION.—The following will be found a most useful formula:

Tannin,	2 oz.;
Alcohol,	4 oz., fl.;
Ether,	12 oz., fl.;
Soluble cotton,	1 drachm and 2 scruples;
Canada balsam,	1 drachm.

Dissolve the tannin in one part of the alcohol, and the ether with the Canada balsam; then add the cotton. —*Dublin Medical Press and Circular*.

A NEW DESTROYER OF THE HAIR.—Under the above title, Dr. Boettger, in the *Memorabilien*, says that we possess a new material for destruction of hair, of a most suitable description, in a mixture of one part of crystallized sulphhydrate of sodium with three parts of fine carbonate of lime mixed and reduced to a very fine powder. This mixture may be kept any length of time without alteration in well-closed bottles. When moistened with a drop of water and laid by means of the back of a knife on the part of the skin covered with hair, we in a few minutes find the thickest hair turned into a soft mass, easily removed by means of water. If it remains on the part long it will cause a slight irritation of the skin. —*London Medical Record*.

URETHROTOMY IN THE AGED (*The Lancet*, November 1, 1873).—Mr. W. L. Crowther advocates median urethrotomy with digital dilatation of the prostate in those persons who, from age, debility, or chronic cystitis, are unfit subjects for either lithotomy or the lateral operation. He says the operation produces only one shock, involves no cutting, either of the prostate or the bladder, is attended with the smallest loss of blood, entails no risk of subsequent hemorrhage, and makes the smallest demand upon the reparative powers.

MISCELLANY.

CHINESE ITEMS.—In the Eleventh Annual Report of the Peking Hospital (1872) in connection with the London Missionary Society, by Dr. John Dudgeon, are to be found some interesting cases of surgery in the treatment of the "heathen Chinese." There is a sect of the Tauist religion, whose practice of tenets contributes greatly towards finding work for the lithotomist. This sect ordains that all its disciples shall practise *kung-fu* or medical gymnastics with the view of strengthening the constitution and preventing disease. Many of their practices are of the vilest and most obscene description. One of the customs which a patient of Dr. Dudgeon learned was the introduction of a short lead bougie into the urethra at night, removing it in the morning. Lead bougies are also used for the cure of gonorrhœa, and in the impotence which Dr. Dudgeon avers sooner or later follows opium-smoking. They are of various sizes, and when about to be introduced are first rubbed with mercury. The patient in question had carried on the habit for ten years, and was convinced that he had thereby not only strengthened his system, but especially improved his complexion. One morning the bougie slipped into the bladder, from which it was then cut out by Dr. Dudgeon, who found it to measure two inches and a half in length and to weigh 256 grains.

Another patient had been in the habit of introducing a chopstick into the urethra; this also disappeared, and had to be cut out of the bladder. The Chinese have a simple way of settling a case of disputed parentage by a method described with great minuteness in the works on forensic medicine. The blood of the parent or supposed parent is to be added to that of the child in a basin of water. If the two coalesce, the case is beyond dispute; but if the drops do not draw together, there is no relationship. Dead relatives are recognized in a similar manner. It is satisfactory to learn that the benefits of vaccination are beginning to be felt and understood in Peking, and that there is in the town a shop for the "sale of anti-opium pills and the diffusion of knowledge."—*London Lancet*.

THE INCOMES OF METROPOLITAN HOSPITALS.—The most wealthy hospitals are the oldest. Bartholomew's, Guy's, and St. Thomas's head the list, with an annual income each of £40,000. Then comes the London Hospital, Whitechapel Road, with its income of £26,000 and vested funds of £200,000. St. George's and St. Mary's have each £15,000 a year. King's College, University College, and the Royal Free are in the receipt of £12,000 a year; the Charing-Cross, of £10,000; and the Westminster, of £7000. Out of sixteen general hospitals, the returns of fourteen show, in the aggregate, an annual income of £220,000. The incomes of the "special" hospitals depend mostly on voluntary contributions. It is thus curious to observe that the diseases which attract the most sympathy are those which cause the most suffering. Foremost among all stand the hospitals for consumption and diseases of the chest; six of these giving a return, as a whole, of £40,947 as the receipts of the year 1870. The institutions for diseases of children show an income of £21,000. Five lying-in hospitals, out of a list of nine, have together £7500; and the Fever Hospital is able to spend £12,500 a year. Cancer, perhaps the most dreadful malady that afflicts us, receives alone £7600 a year; and, after the hospitals for eyes, ears, legs, feet, and every part of the body, come the melancholy homes of the incurables, three of which together receive £34,000 a year. The united incomes of thirty-eight special hospitals are £137,000, making, with the general hospitals, a grand total of £357,000 a year; without counting those institutions whose incomes are not returned, those, like the *crèches*, which partake of the hospital character, or the dispensaries where the poor can get medicine and advice for nothing. At least one-third of this enormous sum is raised yearly by voluntary contributions. If, it is observed, the giving of money is a proof of charity, then the Londoners are a charitable people.—*British Medical Journal*.

F. MAYHEW writes to the *Lancet*, "Eli H—, aged about seventy-five years, is now living in a village near this town. Before he was born, his father made a vow that if his wife, then pregnant, should bring him a girl, she having had three in succession, *he would never speak to the child as long as he lived*. The child

turned out to be a boy. And now what is most strange and remarkable occurred. *This boy would never speak to his father*. Moreover, during his father's lifetime he would never speak to any one but his mother and three sisters. As soon as his father died, he being then thirty-five years old, his tongue was unloosed to every one, and he has remained an ordinary loquacious individual ever since.

"The verification of this strange story is easy enough. Every one in the village was acquainted with 'dumb Eli,' and numerous living witnesses remember his dumbness passing away."

NUMBER OF PHYSICIANS TO POPULATION.—Prussia has one physician for every 3200 inhabitants, Austria one in every 4355, Hungary one in 5492, while Russia has but one for 14,166 people. In the United States, according to the census of 1870, there is one "doctor" to about every 600 of population! Enough, one would think, to justify their being placed under some uniform national regulation.—*Med. and Surg. Reporter*.

NOTES AND QUERIES.

"DR. F. R. THOMAS.

"NITROUS OXIDE GAS!"

"Only office in the city where the entire practice is devoted to extracting teeth absolutely without pain!"

"Colton Dental Rooms removed to 912 Walnut Street. Fresh gas made daily!"

"DR. F. R. THOMAS."

This glaring advertisement may be seen in any of the Market Street city street-cars, conspicuously placarded above one of the windows. If we have not been misinformed, the individual so prominently brought before the notice of the public by this means stands well with his fellow-dentists. Have all the members of the dental profession this liberty accorded them with their diplomas? Is dental surgery a department of the science of medicine, or is it a trade, a business, without a code of ethics?

We should be pleased to hear the status of the dental profession (for such it is termed) defined, in the present day of doubt and uncertainty. If such things be permitted, whither, indeed, is dentistry drifting?

Respectfully, yours,

DENS.

Answer.

Dentistry has been a business; at least we are not aware of the existence of any code of ethics. Whither it is drifting it is hard to say. The editor of the *Dental Cosmos* thinks it is drifting into a profession. *Quien sabe!*

TO THE EDITOR OF THE MEDICAL TIMES:

SIR,—An article which appeared in your journal December 6, under the title of "Tinea Sycosis," has suggested the following question, which I should feel obliged if you could answer for me:

Do the appearances given in the article referred to afford *unmistakable* evidence of a parasitic disease of the hair-follicles?

Yours, etc.,

SUBSCRIBER.

Answer.

TO THE EDITOR OF THE MEDICAL TIMES:

SIR,—In reply to your correspondent "Subscriber," I would say that microscopic appearances alone can afford *unmistakable* evidence of parasitic disease in cases like those to which he alludes.

Parasitic sycosis is one of the rarest of skin-diseases, and, when it exists, a microscopic examination will almost invariably bring to light the characteristic fungus, which is always abundant.

I am, sir, etc.,

CONIDIUM.